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PTO/SB/21 (08-00)

Approval for use through 10/31/2002. OMB 0651-0031

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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/010,720
Filing Date	Nov 13, 2001
First Named Inventor	Walke, D. Wade
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	LEX-0382-USA

Total Number of Pages in This Submission 9

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## ENCLOSURES (check all that apply)

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Remarks

REFERENCES CITED IN (4) BINDERS

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Lexicon Genetics Incorporated Lance K. Ishimoto Reg. No. 41,866	
Signature	<i>Lance K. Ishimoto</i> <i>Peter C. Sabers</i> <i>Reg. No. 41,866</i>	24231 PATENT TRADEMARK OFFICE
Date	November 14, 2002	

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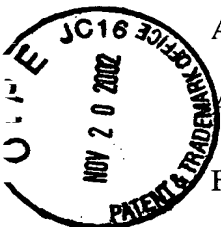
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant(s): Walke et al.

Application No.: 10/010,720

Filed: November 13, 2001

Group Art Unit: 1645

Title: Novel Human Kinases and Polynucleotides  
Encoding the Same, and Uses Thereof

Examiner: Not Yet Assigned

Attorney Docket No.: LEX-0382-USA

Assistant Commissioner for Patents  
Arlington, VA 22202  
Box DD

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
- ☐ Certification under 37 CFR 1.97(e), or
  - ☐ a \$240.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
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  - ☐ a petition under 37 CFR 1.97(d)(2)(ii), and
  - ☐ a \$130.00 petition fee set forth in 37 CFR 1.17(i)(1).  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.



24231

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Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fee required or credit any overpayment for this Information Disclosure Statement to Lexicon Genetics Deposit Account No. 50-0892. A copy of this sheet is enclosed.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

November 14, 2002  
Date

*Lance K. Ishimoto*  
Lance K. Ishimoto  
*Peter S. Serjoo*  
Reg. No. 41,866

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet **1** of **4**

## **Complete if Known**

**Application Number** 10/010,720  
**Filing Date** November 13, 2001  
**First Named Inventor** Walke  
**Group Art Unit** 1645  
**Examiner Name** Not Yet Assigned  
**Attorney Docket Number** LEX-0382-USA

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## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	4,190,496		Rubenstein et al	02/26/80	
	AB	4,215,051		Schroeder et al	07/29/80	
	AC	4,376,110		David et al	03/08/83	
	AD	4,594,595		Struckman	06/10/86	
	AE	4,631,211		Houghten	12/23/86	
	AF	4,683,195		Mullis et al	07/28/87	
	AG	4,683,202		Mullis	07/28/87	
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	AJ	4,800,159		Mullis et al	01/24/89	
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	AP	5,283,173		Fields et al	02/01/94	
	AQ	5,364,759		Caskey et al	11/15/94	
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	AS	5,445,934		Fodor et al	08/29/95	
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	AV	5,468,614		Fields et al	11/21/95	
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	AY	5,556,752		Lockhart et al	09/17/96	
	AZ	5,625,048		Tsien et al	04/29/97	
	BA	5,627,059		Capecchi et al	05/06/97	
	BB	5,631,153		Capecchi et al	05/20/97	
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	BG	5,789,215		Berns et al	08/04/98	
	BH	5,795,737		Seed et al	08/18/98	
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	BK	5,837,458		Minshull et al	11/17/98	
	BL	5,874,304		Zolotukhin et al	02/23/99	
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	BO	5,958,713		Thastrup et al	09/28/99	
	BP	5,968,750		Zolotukhin et al	10/19/99	
	BQ	5,976,796		Szalay et al	11/02/99	
	BR	6,020,192		Muzyczka et al	02/01/00	

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	10/010,720
Filing Date	November 13, 2001
First Named Inventor	Walke
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	LEX-0382-USA

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of

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## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	BS	6,027,881		Pavlakakis et al	02/22/00	
	BT	6,054,321		Tsien et al	04/25/00	
	BU	6,075,181		Kucherlapati et al	06/13/00	
	BV	6,087,555		Dunstan et al	07/11/00	
	BW	6,096,865		Michaels	08/01/00	
	BX	6,110,490		Thierry	08/29/00	
	BY	6,136,566		Sands et al	10/24/00	
	BZ	6,139,833		Burgess et al	10/31/00	
	CA	6,146,826		Chalfie et al	11/14/00	
	CB	6,150,584		Kucherlapati et al.	11/21/00	
	CC	6,172,188		Thastrup et al	01/09/01	
	CD	6,207,371		Zambrowicz et al	03/27/01	
	CE	6,265,548		Pavlakakis et al	07/24/01	

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CF	Askew et al, 1989, "Molecular Recognition with Convergent Functional Groups, 6. Synthetic and Structural Studies with a Model Receptor for Nucleic Acid Components", J. Am. Chem. Soc. 111:1082-1090.	
	CG	Bird et al, 1988, "Single-Chain Antigen-Binding Proteins", Science 242:423-426.	
	CH	Bitter et al, 1987, "Expression and Secretion Vectors for Yeast", Methods in Enzymology 153:516-544.	
	CI	Brisson et al, 1984, "Expression of a bacterial gene in plants by using a viral vector", Nature 310:511-514.	
	CJ	Brogie et al, 1984, "Light-Regulated Expression of a Pea Ribulose-1,5-Bisphosphate Carboxylase Small Subunit Gene in Transformed Plant Cells", Science 224: 838-843.	
	CK	Chien et al, 1991, "The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest", Proc. Natl. Acad. Sci. USA 88:9578-9582.	
	CL	Colbere-Garapin et al, 1981, "A New Dominant Hybrid Selective Marker for Higher Eukaryotic Cells", J. Mol. Biol. 150:1-14.	
	CM	Coruzzi et al, 1984, "Tissue-specific and light-regulated expression of a pea nuclear gene encoding the small subunit of ribulose-1,5-bisphosphate carboxylase", EMBO Journal 3(8):1671-1679.	
	CN	Cote et al, 1983, "Generation of human monoclonal antibodies reactive with cellular antigens", PNAS 80:2026-2030.	
	CO	Gautier et al, 1987, "α-DNA IV: α-anomeric and β-anomeric tetrathymidylates covalently linked to intercalating oxazopyridocarbazole. Synthesis, physicochemical properties and poly (rA) binding", Nucleic Acids Research 15(16):6625-6641.	
	CP	Gordon, 1989, "Transgenic Animals", International Review of Cytology, 115:171-229.	
	CQ	Greenspan et al, 1993, "Idiotypes: structure and immunogenicity", FASEB Journal 7:437-444.	
	CR	Gu et al, 1994, "Deletion of a DNA Polymerase β Gene Segment in T Cells Using Cell Type-Specific Gene Targeting", Science 265:103-106.	

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet **3** of **4****Complete if Known**

Application Number	10/010,720
Filing Date	November 13, 2001
First Named Inventor	Walke
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	LEX-0382-USA

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CS	Gurley et al, 1986, "Upstream Sequences Required for Efficient Expression of a Soybean Heat Shock Gene", Mol. & Cell. Biology 6(2):559-565.	
	CT	Houghten et al, 1991, "Generation and use of synthetic peptide combinatorial libraries for basic research and drug discovery", Nature 354:84-86.	
	CU	Huse et al, 1989, "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda", Science 246:1275-1281.	
	CV	Huston et al, 1988, "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single-chain Fv analogue produced in Escherichia coli", Proc. Natl. Acad. Sci. USA 85:5879-5883.	
	CW	Inoue et al, 1987, "Sequence-dependent hydrolysis of RNA using modified oligonucleotide splints and RNase H", FEBS Letters 215(2):327-330.	
	CX	Inoue et al, 1987, "Synthesis and hybridization studies on two complementary nona(2'-O-methyl)ribonucleotides", Nucleic Acids Research 15(15):6131-6149.	
	CY	Inouye & Inouye, 1985, "Up-promoter mutations in the lpp gene of Escherichia coli", Nucleic Acids Research 13(9):3101-3110.	
	CZ	Irwin, 1968, "Comprehensive Observational Assessment: Ia. A Systematic, Quantitative Procedure for Assessing the Behavioral and Physiologic State of the Mouse", Psychopharmacologia (Berl.) 13:222-257.	
	DA	Janknecht et al, 1991, "Rapid and efficient purification of native histidine-tagged protein expressed by recombinant vaccinia virus", PNAS 88:8972-8976.	
	DB	Kohler & Milstein, 1975, "Continuous cultures of fused cells secreting antibody of predefined specificity", Nature 256:495-497.	
	DC	Krege et al, 1995, "A Noninvasive Computerized Tail-Cuff System for Measuring Blood Pressure in Mice", Hypertension 25(5):1111-1115.	
	DD	Lakso et al, 1992, "Targeted oncogene activation by site-specific recombination in transgenic mice", Proc. Natl. Acad. Sci. USA 89:6232-6236.	
	DE	Lam et al, 1991, "A new type of synthetic peptide library for identifying ligand-binding activity", Nature 354:82-84.	
	DF	Lavitrano et al, 1989, "Sperm Cells as Vectors for Introducing Foreign DNA into Eggs: Genetic Transformation of Mice", Cell 57:717-723.	
	DG	Lewis et al, 1989, "Automated site-directed drug design: the concept of spacer skeletons for primary structure generation", Proc. R. Soc. Lond B236:125-140.	
	DH	Lewis et al, 1989, "Automated site-directed drug design: the formation of molecular templates in primary structure generation", Proc. R. Soc. Lond. B 236:141-162.	
	DI	Lo, 1983, "Transformation by Iontophoretic Microinjection of DNA: Multiple Integrations without Tandem Insertions", Mol. & Cell. Biology 3(10):1803-1814.	
	DJ	Logan et al, 1984, "Adenovirus tripartite leader sequence enhances translation of mRNAs late after infection", Proc. Natl. Acad. Sci. USA 81:3655-3659.	
	DK	Lowy et al, 1980, "Isolation of Transforming DNA: Cloning the Hamster aprt Gene", Cell 22:817-823.	
	DL	Luo et al, 1997, "Mammalian Two-Hybrid System: A Complementary Approach to the Yeast Two-Hybrid System", BioTechniques 22:305-352.	
	DM	McKinlay et al, 1989, "Rational Design of Antiviral Agents", Annu. Rev. Pharmacol. Toxicol. 29:111-122.	
	DN	Morrison and Walsh, 1988, "The Behavior and Significance of Slow-Binding Enzyme Inhibitors", Adv. Enzymol. Relat. Areas Mol. Biol. 61:201-301.	
	DO	Morrison et al, 1984, "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains", Proc. Natl. Acad. Sci. USA 81:6851-6855.	
	DP	Mulligan & Berg, 1981, "Selection for animal cells that express the Escherichia coli gene coding for xanthine-guanine phosphoribosyltransferase", Proc. Natl. Acad. Sci. USA 78(4):2072-2076.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Application Number</b>	10/010,720
		<b>Filing Date</b>	November 13, 2001
		<b>First Named Inventor</b>	Walke
		<b>Group Art Unit</b>	1645
		<b>Examiner Name</b>	Not Yet Assigned
<b>Sheet</b>	4	<b>of</b>	4
		<b>Attorney Docket Number</b>	LEX-0382-USA

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DQ	Neuberger et al, 1984, "Recombinant antibodies possessing novel effector functions", Nature 312:604-608.	
	DR	Nisonoff, 1991, "Idiotypes: Concepts and Applications", J. of Immunology 147:2429-2438.	
	DS	O'Hare et al, 1981, "Transformation of mouse fibroblasts to methotrexate resistance by a recombinant plasmid expressing a prokaryotic dihydrofolate reductase", Proc. Natl. Acad. Sci. USA 78(3):1527-1531.	
	DT	Ripka, 1988, "Computers picture the perfect drug", New Scientist 16:54-57.	
	DU	Ruther et al, 1983, "Easy identification of cDNA clones", EMBO Journal 2(10):1791-1794.	
	DV	Santerre et al, 1984, "Expression of prokaryotic genes for hygromycin B and G418 resistance as dominant-selection markers in mouse L cells", Gene 30:147-156.	
	DW	Sarin et al, 1988, "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", Proc. Natl. Acad. Sci. USA 85:7448-7451.	
	DX	Smith et al, 1983, "Molecular Engineering of the Autographa californica Nuclear Polyhedrosis Virus Genome: Deletion Mutations within the Polyhedrin Gene", J. Virol. 46(2):584-593.	
	DY	Songyang et al, 1993, "SH2 Domains Recognize Specific Phosphopeptide Sequences", Cell 72:767-778.	
	DZ	Stein et al, 1988, "Physicochemical properties of phosphorothioate oligodeoxynucleotides", Nucleic Acids Research 16(8):3209-3221.	
	EA	Szybalska & Szybalski, 1962, "Genetics of Human Cell Lines, IV. DNA-Mediated Heritable Transformation of a Biochemical Trait", Proc. Natl. Acad. Sci. USA 48:2026-2034.	
	EB	Takamatsu et al, 1987, "Expression of bacterial chloramphenicol acetyltransferase gene in tobacco plants mediated by TMV-RNA", EMBO Journal 6(2):307-311.	
	EC	Takeda et al, 1985, "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences", Nature 314:452-454.	
	ED	Thompson et al, 1989, "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targeting in Embryonic Stem Cells", Cell 56:313-321.	
	EE	Van Der Putten et al, 1985, "Efficient insertion of genes into the mouse germ line via retroviral vectors", Proc. Natl. Acad. Sci. USA 82:6148-6152.	
	EF	Van Heeke et al, 1989, "Expression of Human Asparagine Synthetase in Escherichia coli", J. Biol. Chemistry 264(10):5503-5509.	
	EG	Ward et al, 1989, "Binding activities of a repertoire of single immunoglobulin variable domains secreted from Escherichia coli", Nature 341:544-546.	
	EH	Wigler et al, 1977, "Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells", Cell 11:223-232.	
	EI	Wigler et al, 1980, "Transformation of mammalian cells with an amplifiable dominant-acting gene", Proc. Natl. Acad. Sci. USA 77(6):3567-3570.	
	EJ	Wilson et al, 2001, "Human Hypertension Caused by Mutations in WNK Kinases", Science 293:1107-1112.	
	EK	Williams and Cole, 2001, "Kinase chips hit the proteomics era", TRENDS in Biochemical Sciences 26(5):271-273.	

<b>Examiner Signature</b>	<b>Date Considered</b>
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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